



- CONSTRUCTION SEQUENCE-PHASE II**
1. INITIATE CUT-BACK EXCAVATION OF CREEK BANK TO 3:1 (HORIZONTAL TO VERTICAL) SLOPE.
  2. AT SEDIMENT TRAP OUTLET, TRANSITION PROPOSED 3:1 SLOPE UNIFORMLY INTO EXISTING 2:1 SLOPE.
  3. MAINTAIN UNINTERRUPTED POSITIVE GRADE ALONG DRAINAGE SWALE.

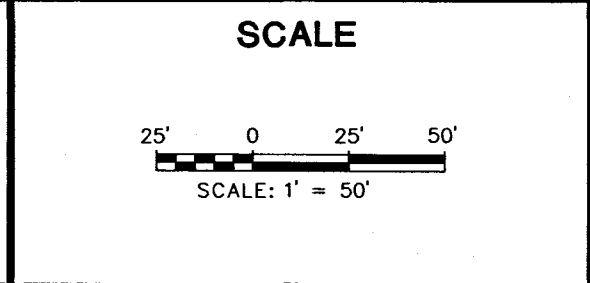
- LEGEND**
- 10— EXISTING CONTOUR
  - 6— PROPOSED SUBGRADE CONTOUR
  - SP— EXISTING TEMPORARY SHEET PILE
  - [Hatched Box] ROCK CHECK DAM
  - LD— LIMIT OF DISTURBANCE (PHASE II)
  - [SCE Box] STABILIZED CONSTRUCTION ENTRANCE
  - [Dotted Box] GRAVEL ROAD/STAGING AREA
  - x— CONSTRUCTION FENCE
  - - - - - LIMIT OF CAP
  - o— PROPERTY LINE

NO.	DATE	DESCRIPTION	APPROVED
REVISIONS			
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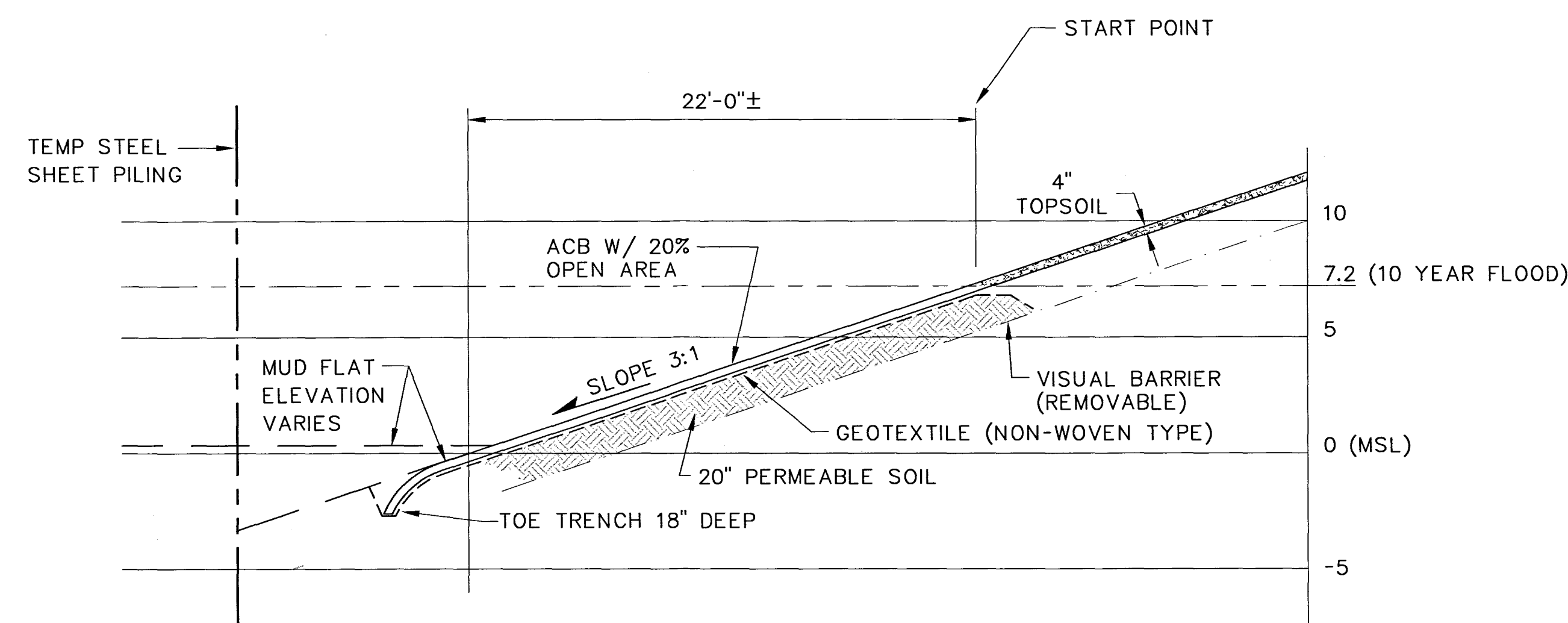
DESIGNED \_\_\_\_\_  
DRAWN D.M.F.  
CHECKED \_\_\_\_\_  
DATE SEPT 2000

 **Tetra Tech EM Inc.**  
Philadelphia, Pennsylvania

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
12th STREET LANDFILL SITE  
WILMINGTON, DELAWARE  
TDD NO. 03-0007-003

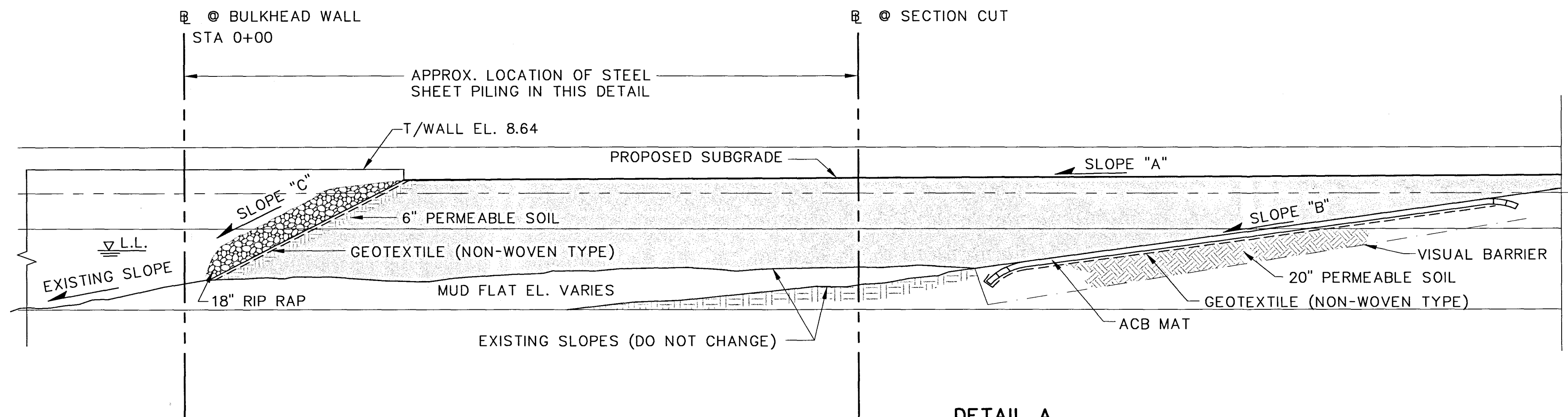


PREPARATORY GRADING PLAN

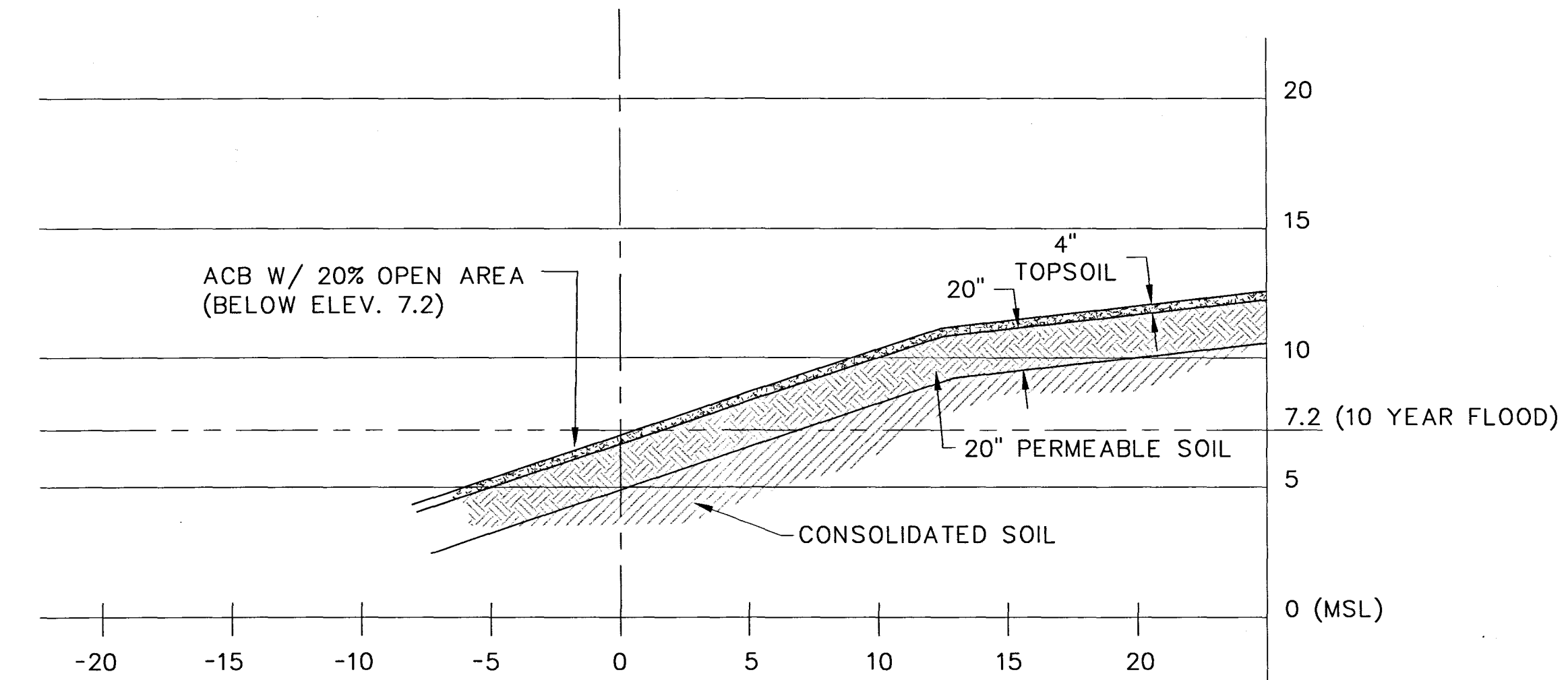


ARTICULATING CONCRETE BLOCK (ACB) INSTALLATION DETAIL

- NOTES:
- SCALE: 1" = 5'
1. FILL OPENINGS IN PETRAFLEX CELLS WITH TOP SOIL. FILL RATE APPROX. 1 C.Y./300 S.F.
  2. INSTALL GEOTEXTILE AS SHOWN ABOVE. USE 12" X 3/8" PINS WITH 1/8" DIA. WASHERS HEADS. INSTALL PINS AT 2' INTERVALS ON EDGES AND AT 3' INTERVALS ON INTERIOR AREA. OVERLAP SEEMS MINIMUM 9".
  3. INSTALL PETRAFLEX AS SHOWN STARTING AT EL. 7.2 ABOVE MSL. ANCHOR IN TRENCHED AS INDICATED.
  4. FILL ANY VOIDS AT TOE OF SLOPE WITH RIPRAP AS NECESSARY TO PROTECT ACB ANCHOR TOE TRENCH.
  5. PLACE ONLY FULL ACB CELLS. WHERE ACB CANNOT BE PLACED (E.G. AT 2:1 SLOPE NEAR OUTLET) USE 6 INCHES PERMEABLE SOIL AND 18 INCHES RIP RAP, SEPARATED BY NON-WOVEN GEOTEXTILE.
  6. MUD FLAT WILL NOT BE DISTURBED DURING CONSTRUCTION.



- NOTES:
1. SLOPE "A" - SLOPE SUB-GRADE FROM ELEVATION 8' AT BULKHEAD WALL TO PROPOSED ELEVATIONS SHOWN ON SHEET 2.
  2. SLOPE "B" - 3:1 AT RIGHT ANGLE TO BASELINE (SEE ACB INSTALLATION DETAIL).
  3. SLOPE "C" - 2:1 AT BULKHEAD WALL.
  4. TRANSITION THE SLOPE FROM 3:1 TO 2:1 UNIFORMLY. RIPRAP SHOULD BE USED ON ALL SLOPES WHERE ACB CANNOT BE PLACED.
  5. PLACE ONLY FULL ACB CELLS. ADJUST LENGTHS OF ACB MATS TO FIT SLOPE LENGTH. START AT ELEVATION 7.2 AND TERMINATE IN THE TRENCH AT TOE OF SLOPE AS SHOWN.
  6. FILL VOIDS AT BULKHEAD WALL WITH LAYER OF RIP RAP OR LOOSE PETRAFLEX CELLS.
  7. SLOPES A AND B ARE NOT IN TRUE SCALE.
  8. MUD FLAT WILL NOT BE DISTURBED DURING CONSTRUCTION.



LANDFILL CAP DETAIL

SCALE: 1" = 5'

VEGETATIVE STABILIZATION SPECIFICATIONS:

- I. SITE PREPARATION  
PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 14 CALENDAR DAYS AS TO THE SURFACE OF ALL SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, BERMS, DIKES, GRASSED WATERWAYS, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) ON THE PROJECT SITE.
- II. SEEDBED PREPARATION AND SEEDING APPLICATION  
THE TOP LAYER OF SOIL SHALL BE LOOSENEED, LIMED AND FERTILIZED BY RAKING, DISCING OR HARROWING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING. FLAT AREAS AND SLOPES UP TO 3 TO 1 GRADE (HORIZONTAL TO VERTICAL) SHALL BE LOOSE AND FRIABLE TO A DEPTH OF AT LEAST 4 INCHES. SLOPES STEEPER THAN 3 TO 1 SHALL HAVE THE TOP 1-3 INCHES OF SOIL LOOSE AND FRIABLE BEFORE SEEDING.
- III. SOIL AMENDMENTS  
LIME AND FERTILIZE ACCORDING TO SOIL TESTS. TEMPORARY SEEDING DOES NOT REQUIRE LIME. IN LIEU OF SOIL TESTS, INCORPORATE THE FOLLOWING INTO THE TOP 4 TO 6 INCHES OF SOIL.  
  
DOLOMITIC LIMESTONE: 2 TONS PER ACRE OR 92 LBS./1000 SQ. FT.  
  
FERTILIZER: 10-10-10 OR EQUIVALENT AT 1000 LBS./ACRE (PERMANENT SEEDING)
- IV. SEEDING:  
TEMPORARY SEEDING MIXTURE:  
SEED: ITALIAN OR PERENNIAL RYE GRASS AT 80 LBS./ACRE OR 1 LB./1000 SQ. FT.  
DATES: 2/1 TO 4/30 AND 8/15 TO 10/31.  
ALTERNATIVE SEED: RYE AT 2 1/2 BU./ACRE OR 3.2 BU./1000 SQ. FT.  
DATES: 2/1 TO 4/30 AND 8/15 TO 11/30.  
  
PERMANENT SEEDING MIXTURE:  
SEED: -KENTUCKY 31' TALL FESCUE AT 40 lbs/ACRE AND INTERSTATE SERICEA LESPEDEZA AT 20 lbs/ACRE.  
DATES: -PERMANENT 2/1 TO 4/30 AND 8/15 TO 10/31.  
  
DURING WINTER MONTHS, "MULCH ONLY" CAN BE USED. HOWEVER, PERMANENT SEED MIXTURE MAY BE APPLIED DURING WINTER MONTHS IN AN EMERGENCY IF 2 TONS/ACRE OF A WELL-ANCHORED MULCH IS USED.
- V. MULCHING  
ALL SEEDINGS REQUIRE MULCHING.  
  
MULCH SHALL BE UNROTTED, UNCHOPPED SMALL GRAIN STRAW APPLIED AT A RATE OF 2.5 TO 3 TONS/ACRE OR 115-140 LBS./1000 SQ. FT. (2 BALES). MULCH MATERIALS SHALL BE RELATIVELY FREE OF ALL KINDS OF WEEDBEDS AND SHALL BE FREE OF PROHIBITED NOXIOUS WEEDS. SPREAD MULCH UNIFORMLY MECHANICALLY OR BY HAND. MULCH ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER MULCH PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY MULCH NETTINGS, MULCH ANCHORING TOOL, PEG AND TWINE OR LIQUID MULCH BINDERS.
- VI. MAINTENANCE  
A. IRRIGATION - WHEN SOIL MOISTURE BECOMES DEFICIENT, IRRIGATE TO PREVENT LOSS OF STAND OF PROTECTIVE VEGETATION.  
  
B. REPAIRS - IF STAND IS INADEQUATE FOR EROSION CONTROL, OVER SEED AND FERTILIZE USING HALF OF THE RATES ORIGINALLY APPLIED. IF STAND IS OVER 30% DAMAGED, REESTABLISH FOLLOWING ORIGINAL RATES AND PROCEDURES.